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MECHANISM.

BY JOSIAH HOLBROOK.

NO. I.

Simplicity and vastness mark the works of God. These are especially the strong features in the mechanism of the universe.—The term mechanism, in the largest and minutest sense of the word, presents a vast idea—a subject inexhaustibly rich, inexpressibly beautiful, and illimitably useful. A telescopic and microscopic view of the subject is indispensable even to a limited comprehension of it. The mechanism of the heavens is so vast as to require a telescope even to get a glimpse of it. The work of infusoria, or microscopic animals, is wholly beyond the power of the naked eye. Inexpressibly minute is vegetable mechanism in thousands of forms, and beautiful when viewed by a powerful microscope. Within a square inch of surface in certain leaves of plants, a microscope has shown a hundred and seventy thousand openings or mouths for receiving carbonic acid gas from the air, to form the substance of the plant—an important fact for farmers.

The animated universe, or living, moving things, exhibit mechanism inexpressibly varied, rich, and beautiful, both in their forms and motions. A fish never moves a fin, a bird a wing, a centipede a foot, a quadruped a limb, or a human being a finger, without an exhibition of some principle or form of mechanism. The infinitely varied forms of natural objects, embracing animal, vegetable, and mineral creation, are far beyond the comprehension of any human being within the period of the longest natural life. Abbe Haüy, of France, spent his whole life on the subject of crystallography—the forms and relations of mineral substances. The most finished hu-

man architect, either in ancient or modern times, though producing works to be admired through ages, is a mere point, well-nigh a dark speck, when compared with the great Architect of the universe. When compared with the vastness, the richness, the beauty, the sublimity, the glory of the architecture of the heavens and the earth—the orbits of the planets and the structure of leaves, and microscopic work of insects—human architecture is poor indeed.

While mechanism, in the broadest sense of the word, has a sketch too far, and a division too minute, for any human power, during any human life, to comprehend, the elements of the whole are entirely within the reach of the child of five, or even of three, years old. The most important element is the most simple object of human observation—a simple three-sided figure or equilateral triangle. Such a figure every pupil in any school of five or five hundred scholars may form, at least approximate, any moment when opportunity should be afforded by their teacher, simply by placing before them slates and pencils with permission to use them. Several of these figures combined exhibit the snow-flake. Combined in a different form, they show the crystal of the diamond, of gold, of iron, of lead, and of nearly a hundred forms of mineral crystals. The next most simple figure, the square, is the next most rich and varied in its combinations.

For human mechanism, it is even more important than the triangle, and scarcely less within the skill of the child.

By a short series of short articles on the subject of mechanism, an attempt will be made to show the importance to every human being of a familiar acquaintance with its elements, and its entire fitness for practical exercises in the primary instruction of every pupil the moment he enters a school.

NO. II. In mathematics an empty cask and a stick of timber are both solids; also, a tumbler of water and a bar of iron, an empty room and a block of granite, a cave and a mountain, a

perfect vacuum and a mass of platina. The terms air, gas, vapor, liquid, and vacuum have no place in pure mathematics; they belong to chemistry. Any figure with length, breadth, and thickness, is a mathematical solid. Five such figures are called "*regular solids*."—Three of these are enclosed in equilateral triangles. Their respective number of sides are four, eight, and twenty; and they are hence called tetrahedron, octahedron and icosahedron. One of the five is enclosed in six squares, and is hence called a hexahedron, or, more commonly, a cube. The remaining one of the five is enclosed in twelve pentagons, or five-sided surfaces, and called a dodecahedron. Of each of the "five regular solids," the sides, corners, and edges are all alike. No matter which side, corner or edge, is presented to the eye, the appearance is the same. This is true, and can be true of no other plain figure but one of the regular solids—a fact of great importance in the subject of mechanism.

Not long since a chemist paid a carpenter nine dollars for a set of regular solids, made of some common wood, say two or three inches in diameter. Thousands have been made by children as their richest amusement, far superior in many respects, and much more instructive from being made by the pupil's own hands. Being made of pasteboard, the outspread surface is seen, showing the mode of combining, as well as the solid in its regular form.

Not long since a box containing the cube, modified by several sections and combinations was procured from France, at the cost of six dollars. Last winter a girl seven years old, the daughter of a member of Congress, made principally under the instruction of another girl of ten years old, a set of illustrations far more complete in effecting their object than those procured from France, though in workmanship inferior of course. To pupil and teacher, it need not be said, the work was amusing instruction, and instructive amusement. With the cube, under several divisions and combinations, the other regular solids, variously modified, were also formed by the same young pupil, and by her juvenile teacher.

By these practical lessons the facts, that in an inch cube are eight half-inch cubes; that in a two inch cube are eight inch cubes; and that in a four-inch cube are sixty-four inch cubes, and the whole principle of the ratio of increase in all solids, become as familiar both to teacher and pupil as that lead is heavy and cork light, or any other physical truth learned by repeated experiments. The doctrine of the cube, thus familiarly, because practically and agreeably learned, is of very great importance,

as being at the foundation of thousands of daily business operations, with that importance greatly increased from the constant and gross blunders in business arising from the general ignorance of this fundamental principle of cubic measure, even among our most intelligent business men. The five regular solids are at the foundation of the beautiful, wonderful, and instructive science of crystallography, as they are of natural and artificial mechanism generally as exhibited in the works of God and man. One or two hundred dollars are frequently paid for models of crystals imported from France.

Experiment.—The clerk of a steamboat once charged freight for a pile of rope for passing cars on an inclined plane, according to his measurement; one-fourth of the price intended; not having learned the difference between an eight foot cube, and eight cubic feet, or other mysteries of the cube; also locked up from thousands to whom it would be well if they were spread out in broad daylight.

We think it due to the estimable author of these essays to place in our columns the annexed testimony to their value, from the honorable Senator Shields, of Illinois, for which purpose we solicited a copy of the letter:

BELLEVILLE, June 11, 1851.

Dear Sir: I have just received the first number of your essays on "*Mechanism*." It will give me great pleasure to contribute to its circulation in this State. I hope to see your essays on "*Geology*" and "*Mechanism*" in every common school in this State, for the purpose of primary instruction. It would be impossible to find a greater quantity of useful information in a smaller compass.

Yours, respectfully,

JAS. SHIELDS.

JOSIAH HOLBROOK, Esq., Washington.

NO. III.

A turning lathe is an instrument of science, skill, and taste—boundless in each, consequently of usefulness and pleasure. The varieties of work, capable of being done by the lathe, are numberless and nameless. Each new piece of work suggests several others.

The first most simple thing to be made by a lathe is the cylinder, a round stick. Next is the cone; a cylinder tapered to a point at one end. Then the sphere, a perfectly round body. These give the starting point, the foundation for all other round bodies. Among the articles readily made by a lathe are boxes of endless variety, handles, knobs for doors and sundry other purposes; letter stamps,

sand boxes, screws, needle cases, canes, rake teeth, pins and trundles, tops, minerals and various tools polished, drillings made, spools, bobbins, plates, cups, &c.

Besides an endless variety of sundries, three articles of very great importance, each constantly enlarging, may be made by the lathe, as a source of instruction, amusement and profit to those preparing for future usefulness and respectability. These are globes, surveyor's compasses and microscopes. After obtaining a globe print, (not difficult,) any boy, or girl either, can make their own globes, simply by turning a sphere of the right size and pasting upon it the print. After the globe is covered, paint and varnish will put on the finish—the whole exactly fitted to young hands and inquisitive minds. With globes, balls for orreries, telluriums, and other astronomical and geographical illustrations, will naturally come in the train.

By the use of a lathe every boy can make his own surveyor's compass. It would, of course, be simple—just such as would be best fitted for his first experiments in surveying.—The box could be made of wood, the needle magnetized by the pupil himself, and the figures for the dial-plate, the sight, and every thing essential for his surveying experiment, could be made by the pupils' own hands. His scientific knowledge and his practical skill would begin and advance together.

Microscopes vary in price from twenty-five cents to five hundred dollars. By a little skill in the use of the lathe, any boy or girl of ten years old could grind a lens for a simple microscope, to be used by themselves and their friends. Perhaps it would be difficult to conceive of a much more instructive or entertaining household utensil or pocket companion than a microscope. It virtually creates a new world, surrounding us on every side. It may well be doubted whether any one thing would add more to the amount of human happiness than a microscope or magnifying glass in every family in the world, especially if made by the younger members.

It is not necessary further to enlarge upon the uses of a turning lathe to show its great importance as an instrument of instruction and entertainment in every school and family too. No one can doubt that it would do more to cure the truant and prevent rowdiness than the largest supply of the "juice of the birch" in schools, or houses of refuge for juvenile delinquents on every other corner of the streets in all our principle cities.

EXPERIMENTS.—Within a few weeks past, sundry teachers and parents in Washington, have encouraged their pupils and children to prepare specimens of writing, drawing, mechan-

ism, &c., as offerings to patriotism and to science, to be distributed by the hands of government functionaries, both of our own and foreign countries, for exhibition at agricultural fairs, &c. As could be doubted by no one, all concerned give their united testimony in proof of extraordinary improvement, both of the hands and minds, of pupils thus vigorously directed to so high an object.

NO. V.

Next to making surveyors' instruments by young hands would be excursions for using them. Such excursions would combine instruction, amusement, and health—in no way unfitted for girls, and for boys of the most substantial benefit, no matter what their future vocations. An acquaintance with setting the compass to ascertain the direction of a fence, road, stream of water, or other object, carrying the chain to determine the distance or length of a certain line, keeping a field-book, and sundry other operations in practical surveying, could be rendered familiar by a very few excursions, which would of course be entered into with great spirit by any company of boys or girls in the world.

With surveying instruments, hammers, chisels, and bags, for examining and collecting minerals, would come in play most opportunely. To these might be added pencils and paper for making sketches in different departments of natural history, of natural scenery, of buildings, public works, or any interesting object which might come under view. An afternoon's excursion for these several objects, all combined, would furnish ample and profitable work for the next day; indeed, to fill up the leisure time for a week in preparation for another occasion of the same character.

Among the exercises on mechanism furnished by such operations would be penmanship, drawing and sketching routes, plans, and other designs for business purposes, both private and public, and almost innumerable kinds of work directly connected with farmers and mechanics, indeed every body, whether in business or scientific pursuits; either of the lowest or highest of human undertakings.—The farmer, by science thus reduced to practice, would use more skill and economy in dividing and fencing his fields, in apportioning his grounds to their respective uses, in planning and constructing his buildings, indeed in every department of his most noble occupation. Not only farmers, but merchants, and all classes wishing for the erection of buildings could be their own architects; far more certain to avoid fraud, and to be furnished with such

houses as they desired and expected, than under the system now common in building operations.

If all the boys, and girls too, in all schools could be instructed, entertained, and invigorated by excursions for geology, botany, surveying, pencilings, drawings, &c, the whole race would have sounder minds in sounder bodies, and a few from the whole would become skillful and professional artists, engineers, naturalists, and amateurs, and patrons of practical science thus to be extended without limits.

Grounds for complaints now common, indeed almost universal, by parents and other patrons of schools, that very small returns are received for the vast outlays for them in time, tuition, books, and sundry materials, would in a great measure be removed. The immense expense incurred simply from the *change of books*, now felt so severely, would in a great measure be avoided. If varied, systematic, and thorough lessons were taken from the book of all books—*Creation*—it would matter but little what other books were used as aids.

EXPERIMENT—For several years past the amusements of August holydays have been greatly enriched by "SCIENTIFIC EXCURSIONS." Those now at hand may doubtless by such occasions be richer than any which have preceded them. Nearly every boy and girl in Washington, New York, and many other places is so familiar with the minerals composing the elements of mountains, rocks, and soils, with many admired for their beauty, as readily to form collections to take or send to their friends less acquainted with these important elements of knowledge. Aids to science thus rendered would enable pupils, especially those going into the country, to procure valuable additions for their school cabinets. A large portion of such collections in some schools have been contributed by the pupils, especially on reassembling at the close of August holydays.

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Farming and mechanism are the two great pursuits of human beings. Upon them depend all other pursuits, both for their success and their existence. Merchants, lawyers, judges, statesmen, politicians, physicians, clergymen, artists, commodores, generals, sailors, soldiers, travelers, amateurs of science and art, speculators—men, women, and children of every class and condition—can trace their operations, their success, and their living, to the labors of the farmer and the mechanic. The principles on which are founded the operations and the success of these great pursuits must be of some interest to all classes, and to those

engaged in them of paramount importance.— They are no more important to the man than interesting to the child. To farming, a wider range of science is applicable than to any other pursuit. Neither the lawyer, physician, clergyman, college professor, nor any person engaged in any other pursuit, has so good opportunities, or so many occasions, to become a man of sound extended practical science, as the farmer. Every farmer is a geologist, chemist, and botanist, though he may not be aware that he is either. He also takes many severe lessons on entomology. Lessons on that subject cost Pennsylvania near twelve millions of dollars in one year through the ravages of the wheat-fly. Every motion of every tool, whether by the farmer or the mechanic, is a practical experiment in natural philosophy.— Meteorology, as exhibited in winds, rains, climates, elevations, and exposures, comes directly home to the work of the farmer, showing to him its importance as a subject of knowledge. To moral science his situation is pre-eminently favorable.

Subjects of science coming directly to the aid of the mechanic, though less numerous than those of the farmer, still form a large circle. The remark is sometimes made that all science resolves itself into chemistry and geometry.— Whether that remark is strictly true or not, these two sciences are especially interesting to mechanics. Mechanism and practical geometry are virtually one and the same thing. Mechanism is the modification of form, which is geometry put into practice. Mechanics also have constant occasion to use natural philosophy in its various departments.

Under the wise ordinance of Heaven, the sciences most essential to human pursuits and human existence are most eagerly sought for by the juvenile mind in its unadulterated unsophisticated state. Every child since Adam has been a "self-instructor" in geology, chemistry, geometry, botany, entomology, and nearly the whole circle of natural science: so rapid their progress, and so vast and substantial their acquisition in this kind and mode of instruction, as to render the remark common that we learn more during the first three years of life than in the same time during any subsequent period—a severe comment on schools. Lord Brougham once remarked, "If we should be deprived of what we learn during the first 3 years of life, we should be the most ignorant beings on the face of the globe."

Though these facts must probably take from the mouth of any objector the argument or claim that young minds are not competent to a comprehension of natural science, the objection may still be urged that the common mechanical exercises in reading, writing, and spelling

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dom, he may produce the belief that he is what he is not. The clergyman has time, a choice of subjects, and a world of other men's thoughts to aid him in his preparations for the pulpit. But the lawyer, whether in the office, or before a court and jury, can assume nothing which he does not possess. His legal opinions are soon to be tested by the severest ordeal, and his powers as an advocate must be real, or they will avail him nothing.

And I would also have you remember, that in your profession you will be beset with constant temptations to swerve from the high standard of moral integrity. The very obligations of the lawyer to defend his client, right or wrong, tend to familiarize him with error, and to blunt his natural abhorrence of depravity. And by obligations, I mean such only as would lead him to seek the great ends of justice. Beyond this, even though it should result in your own aggrandizement, I would not have you put forth a single exertion. In the defence of one whom you believe to be guilty, proceed no further than is necessary to elicit the truth by an even balance of testimony. It is a fearful thing to encourage crime, even though it be in the way of professional defence. But I must close. It pleases me much to learn you are so happy, and doing so well.

J. C. CALHOUN.

HANDLING MELTED METALS.—A late number of Silliman's Journal of Science has an interesting article on the handling of melted metals, in which Bontigny's experiments are given. He divided with his hand, it is stated, a jet of melted metal of five or six centimetres, which escaped by the trap, and then plunged the other hand into a pot filled with incandescent metal. Both hands came out of the ordeal uninjured. The only precautions the experimenter gives are—"To have no fear, to make the experiment with confidence. The experiment succeeds, especially when the skin is humid; and the involuntary dread which one feels at facing these masses of fire, almost always puts the body into that state of moisture so necessary to success; but, by taking some precautions, one becomes veritably invulnerable. The following is what has succeeded best with me: I rub my hands with soap, so as to give them a polished surface; then at the moment of making the experiment, I dip my hands into a cold solution of sal ammoniac saturated with sulphurous acid, or simply into water containing some sal ammoniac, and, in default of that, into fresh water."

Most readers would prefer seeing the experiment tried by others before venturing up-

on it themselves, notwithstanding the assertion that it may be done with perfect safety. The individual who failed in the experiment would be very apt to "burn his fingers."

Sweetly and truly does the poet express himself when he sings—

There's nothing half so sweet in life
As Love's young dream.

But there is something which possesses a bitterness equal to that sweetness, if not exceeding it; and that is the moment when a young, ardent, and ambitious spirit first feels the coldness of a sad disappointment—when, after coming forth into the world with its pretty nursery of bright hopes, it suddenly finds them withered, blighted, and cast away, like the forgotten leaves of autumn. That coldness has broken some hearts, while others, more impetuous, yet disdainful of life's discipline, or distrustful of its uses, have made voluntary graves for themselves, and have lain down in the dust to die with their withered hopes. Happy are they who have the grace and strength to look wisely on disappointment, for in it there is often much beauty for the eye, and much instruction for the heart.

About ten miles to the southeast of Saratoga Springs, there is a small lake, well worthy the attention of the curious geologists. Around it for a considerable distance stretches a valley that shows many indications of having once been full of water, but which has been drained by the bursting of its southern boundary towards the Mohawk river. In the centre deeply shaded by the wood lies the present, lake not more than a quarter of a mile in length. The shape is serpentine, and although several small streams empty into it, no outlet has ever been discovered.—Very slight changes are perceptible in the water-mark even at the period of the spring freshets.

No soundings have ever been made in it yet although deep sea lines have been used. The shores are bold and perpendicular as a wall, descending downward to an unknown depth. The mightiest ship that ever floated could touch the shore in any place with safety. Its surface is calm as a mirror, for it is seldom touched by the boisterous wind. The water though seemingly clear, appears black, from its depth and the shadows of the trees on the shore.

It has nothing of the dish shape usually pertaining to lakes, seas, or oceans. It seems like an immense crevice in the solid crust of the earth's surface thrown open by a convulsion of nature, as an earthquake, long centuries ago.

JOURNAL OF EDUCATION.

EDITORS: { S. S. RANDALL, of Albany.
Wm. F. PHELPS, " "
JOSEPH MCKEEN, of New-York.

ALBANY, NOVEMBER 1, 1851.

To the Readers of the District School Journal of Education:

The subscriber proposes to give a copy of the volume of the Hon. IRA MAYHEW, A. M., late Superintendent of Public Instruction for the State of Michigan, on "POPULAR EDUCATION," to every person who will obtain SIX SUBSCRIBERS for the "Journal of Education" and remit three dollars for a year's subscription. This volume recently published by Harper & Brothers, ought to be in every Teacher's and in every Family Library; and it will be useful to the receivers of such a donation, and gratifying to me, if I have, under this obligation, to give a couple of hundred copies of that excellent work during the coming year.

JOSEPH MCKEEN,

Supt. Common Schools, New-York.

New-York, Aug't. 25, 1851.

UNIVERSAL EDUCATION.

Of all the philanthropic enterprizes of the age, the effort now in progress throughout the civilized world to secure to every child the most ample facilities for, an early and systematic mental and moral culture, seems to us the most beneficent and important. To this end the systematic march of science and art through the revolving centuries—the slow and measured tread of philosophy—the advancing wisdom of legislators and statesmen—and the solemn oracles of revelation—have steadily tended. For the ultimate accomplishment of this great object—the universal education of humanity—the noblest spirits of the race have labored in every age; and each succeeding generation has reaped the imperishable fruit of their exertions and sacrifices. Not until the human mind has been enlightened by true knowledge—not until the intellect has been properly cultivated and improved—and every affection, passion and emotion of our nature, disciplined and refined—not until the deadly mists of ignorance, error and delusion have been dissipated by the light of truth—can the mysterious problems be solved—of our earthly and immortal existence, our material and spiritual nature, our relation to time and eternity, our responsibilities to the present and the future, our duties to ourselves and to others, and the indissoluble connection which exists between the transitory incidents of the passing hour, and their illimitable expansion throughout the ages of eternity. He who is instrumental in reclaiming one of the least of these immortal spirits from the bondage of ignorance: in unfolding its vast capacities: in elevating it from the groveling

things of time and sense to a clear conception of truth and duty; in conferring upon it the power of thought and reason—of self-control and self-determination—shall achieve a greatness before which the lurid glare of human fame in its hour of highest triumph shall "pale its ineffectual fires"; and the humble and devoted teacher, who, all unknown and unregarded by the busy world, daily gathers around him his little flock, and imparts to their guileless and unperverted minds, those fundamental principles of knowledge by which their whole future existence is to be guided and directed, is infinitely more to be honored than all the conquerors who have desolated the earth with blood, and reared triumphal arches of glory upon the crushed affections and outraged rights of humanity.

TEACHERS of the Empire State! how high, how honorable, how noble, how beneficent, is the mission you are called upon to fulfil! What vast capacities of usefulness are confided to your hands: how imperfectly are your labors and sacrifices, your devotedness and your trials comprehended or appreciated! How melancholy is the reflection, that while in ten thousand happy, flourishing and prosperous neighborhoods, scattered over the broad surface of this great Commonwealth, you are daily engaged in diffusing the light of knowledge, and in training up to virtue, to usefulness and honor, almost the entire rising generation—nearly every other field of labor, professional or mechanical, is more liberally compensated, and offers, in a mere pecuniary point of view, higher inducements than your own! But be not discouraged: it will not always be so. You have nobly, disinterestedly, magnanimously, chosen; and future times will not fail to vindicate the wisdom of your choice—to do justice to your motives—to honor your sacrifices—to cherish your remembrance—and to hand down your names as the true benefactors of your kind. To you, beyond all others, are the friends of Universal Education indebted for the triumphant recognition of the great principle of Free Schools.—Be it your aim to perpetuate this noble achievement—to insure its ultimate expansion over every department of our magnificent system of Public Instruction—to open the doors of every College, University, Academy and School, freely, to every child—and to remove the last remaining restriction upon the avenues to the temple of Knowledge. In the prosecution of this enterprise, you will encounter much of ignorance, passion and prejudice—your motives will be assailed—your efforts impeded, embarrassed and obstructed—your energies of body and mind tasked to their utmost tension—and many of your number, it may be, will be permitted only a Pisgah view of the land of promise, on this side of eternity. Be it so. Those among us who have put our hands to this great reform of the age, have no desire nor intention to look back.—We have counted the cost; and in our estimation all the perils and hazards, all the labor and obloquy—

even life itself is not to be weighed in the balance with the consciousness of that duty we owe to God and to our fellow men. If, through our combined instrumentality, the priceless blessing of Education and a thorough mental and moral culture shall be secured to every child in our beloved Commonwealth, without discrimination or restriction; if, in the goodness of a superintending Providence, we may be permitted to look forward, with full assurance of faith to that period when the halls of learning and the temples of science, from the highest to the lowest, shall be freely opened to every votary of knowledge, and when each one of the millions who are to constitute the future citizens of our State—the administrators of its vast and varied interests—the recipients and dispensers of its civilization, and the arbiters of its destiny—shall be gathered into institutions liberally endowed from its ample resources—how infinitely little will it import, whether our frail energies survive the noble warfare thus triumphantly maintained! We shall not have existed wholly in vain; and the world will have been somewhat the better for our having lived in it. Principles will have been implanted, and truths proclaimed which can never die; and the unerring awards of eternity alone can measure the good thus accomplished, and the blessings thus conferred upon humanity.

A WORD OF ENCOURAGEMENT TO TEACHERS.

The concurrent testimony of the most eminent and experienced educators of the age—of teachers who have devoted their lives and the highest mental and moral powers to the work of elementary instruction—and on whose integrity and intelligence, we may safely place the utmost reliance, establishes beyond the possibility of doubt or cavil, the important fact that out of every hundred children placed for a period of ten months during each year between the ages of four and sixteen under the care of teachers of the highest grade of qualification, ninety-nine even of the first generation submitted to the experiment would become "honest dealers, conscientious jurors, true witnesses, incorruptible voters or magistrates, good parents, good neighbors, good members of society—temperate, industrious, frugal, conscientious in all their dealings, prompt to pity and instruct ignorance, public spirited, philanthropic and observers of all things sacred."—"I have no hesitation in saying," observes one of these teachers, "I do not believe that *one*—no, not a single one, would fail of proving a prosperous and respectable member of society. Nay more. I believe every one would, at the close of life, find admission into the world of endless peace and love. I say this solemnly, deliberately, and with the full belief that I am upheld by such imperfect experimental trials as I have ~~been~~ ^{been} ~~seen~~ ^{seen} made by others; but more than this, that I am sustained by the authority of Heaven,

"Train up a child in the way he should, and when he is old, he will not depart from it." These were the views of such men as the venerable JOHN GRAISCOM, a teacher whose experience extends over a period of upwards of forty years, whose purity of character and soundness of intellect are universally conceded, and whose single testimony on this point would be conclusive; of the lamented PAGE whose brief career shed a brilliant lustre on the science of education; of SOLOMON ADAMS of Boston, a teacher for a quarter of a century; of JACOB ABBOTT, whose name and fame are inseparably identified with this noble profession; of F. A. ADAMS of New Jersey, E. A. ANDREWS of Connecticut, ROGER J. HOWARD of Vermont, and CATHERINE E. BEECHER whose great experience and eminent philanthropy are widely known. With such an array of testimony are we at liberty to doubt the conclusions to which these distinguished educators have arrived? And if these things are so; if through the agency of public and free schools, in charge of competent and thoroughly qualified instructors, *ninety-nine out of every hundred* of the youth of our land may be reclaimed from the domain of ignorance and error and vice, and rendered the recipients and dispensers of knowledge and virtue and usefulness and honor,—how long shall we in the full blaze of the meridian light of the nineteenth century be justified in deferring this great enterprise of intellectual and moral amelioration thus demanded by the voice of an enlightened and expansive philanthropy? With such noble results in view, how long shall we fold our hands and look tamely on, while thousands of our brethren of the human family are annually sinking before our eyes, the helpless victims of wretchedness, misery, degradation, guilt and crime—and millions of treasure are annually exhausted in the detection, conviction and punishment of flagrant offenders?

POPULAR EDUCATION IN EUROPE.

The practice of education as it is carried on, and as it results in other countries, must always afford interesting facts to the American who justly values the institutions of his own country. How much these excel, or how much they fall short of the provisions of other States, is an inquiry which throws light upon the duty of all who are employed, directly or indirectly, in the discipline of the young of our own land.

England, the country, for the most part, of our ancestry, and, exclusively, the parent of our language, our literature, and our common version of the Scriptures, is that to which we should naturally look for an example in the extent and thoroughness of education. Unhappily that great nation only brings under cultivation a small portion of her children. This favored portion, it is true, are in all respects taught excellently well, except that they are rarely directed

to a participation of this inestimable benefit with the class that is cut off by the neglect of legislation.—“England,” says a late writer upon the subject, “stands the lowest in the scale of what must be looked upon as civilization; for she provides fewer means for promoting it than any of her neighbors. In England education is a commodity to be trafficked in; on the Continent it is a *duty*.” In England the teacher is responsible only to the pay-master; in other countries teachers are appointed by the State, and a rigid supervision is maintained over the trainers of youth—both, as regards competency and moral conduct. In England, whoever is too poor to buy the article—Education—can get none of it for himself or his children. In Germany, and in many parts of the United States the government provides it for the youthful population. Taking the whole of Scotland, France, and Belgium, about four-ninths of the children, of proper age, are acquiring the rudiments of knowledge; while in England only one-fourteenth are so cared for by public provisions. Of all the children between five and fourteen, more than one-half attend no place of instruction.

In England and Wales, including children under five years of age, it has been calculated that 6,000,000 of human beings can neither read nor write. In the midst of the most enlightened society in Europe, may be encountered degrees of ignorance that could not be believed from mere report; but everywhere, in the streets and the fields, and in public assemblies, the shadow of ignorance sweeps over the intelligent observer. Many petty jurors in the rural districts can only make a cross for the sign manual; the rural population, generally, being in a lower state of intelligence than the other classes, it is almost impossible to exaggerate the ignorance in which they live and move and have their being. One of them cannot be addressed by an educated person without giving proof of the intellectual darkness that envelopes him. The whole expression of his face is more that of an animal than a man. As a class, they have no notions of enjoyment beyond the gratifications of the senses.”

An intelligent clergyman being questioned whether he often found that persons of the laboring class read for their own amusement, or for that of others, replied, “Such a sight is seldom or never witnessed. In the first place, *the great bulk of them cannot read*; in the next, a large proportion of those who can, do so with such difficulty that no pleasure can be thus enjoyed; again, few of those who can read with comparative ease, have the taste for doing so. Many, however, who cannot read regret their inability.”

So much at present for England; there are other countries that exhibit more cheering views. According to Mr. KAY's work on the Social Condition and Education of the Poor in Europe, “it is a great fact that, throughout Prussia, Saxony, Bavaria, and many

others of the German States, besides Norway, Denmark, Switzerland, and the Austrian Empire, *all* the children are at the present time actually attending school, and are receiving a careful education—religious, moral and intellectual—from well instructed and efficient teachers. All the youth of Holland, besides a great part of those in France, below twenty-one years of age, can read, write and cypher, and know something of the Bible and the history of their own country. The children of the poor in Germany, are, in many parts, so clean, so ready to acquire learning, and so much polished in their manners, that the rich often send their children to the schools intended only for the former class.

“I remember one day, says Mr. KAY, “when walking near Berlin, in company with a Professor in the Normal College, we saw a poor woman in the road, cutting up logs of wood for winter use. My companion pointed her out to me, and said, ‘Perhaps you will scarcely believe it, but in the neighborhood of Berlin, poor women, like that one, read translations of Sir Walter Scott's novels, and many interesting works of your language, besides those of the principal writers of Germany.’ This account was afterwards confirmed by the testimony of several other persons. Often have I seen the poor cab-drivers of Berlin, while waiting for a fare, amusing themselves by reading German books, which they had brought with them in the morning, expressly to occupy themselves with in their leisure hours.”

“In many parts of the country, farm-laborers and the workmen of towns, attend regular weekly lectures or weekly classes, where they practice singing, or learn Drawing, History, or Science. The intelligence of these people is apparent in their manners. The German, Swiss or Dutchman, who has been brought up under this system; that is, those under forty years of age, is generally distinguished by a proper dialect. They speak as their teachers speak—clearly, grammatically, and without hesitation—in a manner that assimilates the humblest to the man of wealth and superior education.”

It is obvious that such manners and acquirements are a defence against low vice; they exclude intemperance, profaneness, and unrestrained passions, and are parts of the character which is pure, honest, and of good report; and which, of consequence, must ultimately form the virtue and happiness of any people.

Education among the Choctaw Indians on our South Western Frontier.

Education owes more to the missionary zeal and enterprise of our religious organizations than is generally supposed. The ramifications of commercial relations have done much for the extension of civilization among the barbarous tribes of our race in different parts of the world, but when the commercial enter-

prise of a great people is consecrated by christian love for a poor and ignorant tribe of men as has been exemplified in the case of the Choctaws, we are made to rejoice in the brightening prospects of a long neglected and much wronged portion of our fallen race. Messrs Kingsbury, Ryington and Wright who have long given their consecrated talents to this people ought to have higher motives awarded to them than commercial advantages either for themselves or for others. The arts of peace and industry, the enjoyments of civilization and knowledge are but the incidents and means of the great work of human advancement in which they are, and have been for more than thirty years engaged.

It will be remembered that these people are on the Indian territory south of western Arkansas, and it will interest many to know that they have several flourishing schools at different points, of influence throughout that territory, viz: at Stockbridge, Wheelock, Norwalk, Pine Ridge, Good-Water, Good-Land, Mount Pleasant and at other places.

We hope to be able in our next to give some account of these schools, and of the feebler and more needed mission schools among the Cherokees. But little is now doing among these last mentioned people in the way of schools. Attempts are now about being made to establish schools under female teachers, for the instruction of these interesting children of the forest at Dwight Pack's Hill and Lee's Creek.

We are in hopes also in our next, to be able to give some account of the educational prospects of Oregon and California. It will do us all good to look at the moral condition of our whole country. This expansive domain must never be sundered for want of patriotism in the old *thirteen*. Their Anglo Saxon tongue is yet to be spoken in all lands. These small beginnings by self-denying men in the back settlements are as seed planted in good ground that shall yield a hundred fold. Every lover of his country should keep himself advised of their progress: remembering that these small school establishments are conservators of the peace of our frontier people, a security of the perpetual integrity of our republican Union of States and an earnest of our hopes for the world.

For the District School Journal of Education.
GREENBUSH, 1st Sept., 1851.

To MESSRS. RANDALL & PHELPS:

GENTLEMEN—At the instance of several persons, I have been induced to prepare a notice of a casual examination of a district school in the towns of Greenbush and Schodack, held at the school-house, on the 13th of August last, and which has but recently been established, and for which you have, from its commencement, rendered so much generous assistance, to the Trustees in enabling them to accomplish and perform their important duties, and have manifested so much interest for its ultimate success; and as the

cause of education is a paramount sentiment with you, I presume such a statement will not be the least among the many interesting subjects of this nature.

Not, however, that we are induced to believe that the consequences of benevolent exertions are likely to manifest themselves in over abundant measures, but that, in this case, the satisfaction expressed by those who witnessed it was greatly gratifying, and the results reflecting much credit upon the various teachers who, at different times, have had the school in their charge.

For years there had been no school in this district—and on the 24th of July, 1850, this school was organized, and commenced upon a four months term, by Miss HARRIET E. CHICHESTER, (a graduate of the Normal School,) and to her is this district indebted for an admirable system of instruction, at once the delight of the parents, and tending strongly to entice and allure the child into the paths of knowledge.—Death, however, arrested her in the midst of her useful career, and created no trifling forebodings.

After the lapse of one month Miss ELMORE (a graduate of the same Institution,) completed the session in the following December, upon the system previously established.

In the middle of February, 1851, another term commenced under the auspices of Miss HARRIET BUSHNELL, (another Normal,) who completed, on the day of the examination, but five of an eight months term, with an intermission of three weeks during this term, and at whose desire and under whose supervision this casual examination took place.

Thus exhibiting an aggregate of nine months schooling, with three unavoidable intermissions during the terms, three different teachers, and a long interval of time between the terms themselves, the duties now devolving upon a fourth teacher, for the remaining part of the second school session.

During all these changes, the system originally established has not been departed from in the least particular, showing the important results of a systematic organization of school duties being established in our district, subjected as they necessarily must be and are, to these perplexing changes, in counteracting to a great degree, influences creating dissatisfaction in the minds of the people and parents—retarding the progress of the children in the acquisition of knowledge—destroying to a great extent, the usefulness of the institution, if not eventually annihilating the district itself.

I would now state that this school is small, although the general attendance has seldom or never numbered less than fifteen, and from that, according to the season, ranging as high as thirty-five, and that nearly or quite one-half of the whole number could neither spell or read well, and very many commenced the alphabet at its organization; and at the examination, in a class of eighteen pupils, none of them have, as yet, reached their eleventh year.

This examination was the combined result of the exertions of the different teachers, springing out of the system previously adopted, but brought out into strong relief by the unsparing exertions of Miss BUSHNELL.

The exercises commenced at 1 P. M. on the 13th of August last, with reading, when every word was clearly and distinctly pronounced, each sentence properly sounded and punctuated, and the whole given with a force and energy indicating a comprehension of the subject, and that the feelings were enlisted in what they were doing; so with each class in rotation—nor were the readings purposely selected, but taken up where chance presented them, showing that much care had been taken by the teachers in this important branch of education; progressing through several minor branches, they gradually enlarged upon a promiscuous examination in Geography, when the outline maps were brought into requisition, and when, from almost the youngest to the oldest, questions were propounded in relation to the definitions, and explanations becoming merged in questions relating to different States and countries, and all answered in a tone of confidence, and with much alacrity: some then proceeded to the blackboard, which was covered with beautiful maps of different States, drawn by the hands of the pupils themselves; and as each one was selected by the teacher, he or she commenced and completed the geographical description and detail of his or her map, without the slightest hesitation, and of their own accord diversified the recitation with historical anecdotes of their own selection.

From this they were ushered into a series of questions (indiscriminately selected,) of Mental Arithmetic—with those of the most simple forms, and successively assuming a degree of intricacy beyond the expectations of those present; repeating and answering the examples with but little hesitation, occupying in this interesting branch, a period of time of more than one hour. The smaller children were exercised in similar questions, to the extent of their acquirements, and exhibited an equal promptitude in the performances of their duties.

The writing down of successive numbers upon the blackboard, and the enumeration of them in the English and French systems were performed with much celerity. Time would not, however, admit a further display upon the blackboard, beyond the fundamental rules of Arithmetic.

Short speeches, dialogues, &c., were given by nearly all the scholars, and the little things really seemed to enjoy their own performances.

Compositions were read by those who composed them, and from the assurances of the teacher, they were the result of their own labors. Upon the whole, coming as they did, from mere children, they were beautiful emanations.

I cannot forbear to mention, (and it was particularly observed by others,) that during the whole time of the exercises, (a period of more than four hours,) which were occasionally relieved by some of our sweet little school songs, not a child desired to leave its place for any purpose whatever, or even appeared weary with the length of time they were engaged with their exercises; but on the contrary, each one seemed to anticipate, and was eager to perform the task imposed.

Everything was in perfect arrangement, and one and all moved with ease and freedom, as though the examination was but the necessary consequence of yesterday's labors. Nor have I seen at any exhibition of the kind, energy and anxiety so conspicuously blended in the motions and expressions of the teacher, as upon this occasion: the whole school seemed lit up with beams of hope and joy, pleasure and gratification—for it was the first manifestation of the kind (although a casual one,) that had occurred in this district for twenty years, and for aught I know, the only one.

The exercises were closed with a full chorus from the children, in a beautiful farewell song, arranged and responded to, by the teacher. Appropriate and pertinent remarks, expressive of an unexpected gratification and a high appreciation of the result, for so new a school, were made by V. WITBECK, Esq., Town Sup't., than whom few are more competent to judge of the progression and condition of a school, and whose judgement is so well matured by many years experience in advancing and promoting the interests of education.

Respectfully yours,

T.

CHEMICAL SCIENCE.

A NEW CHART OF CHEMISTRY. BY EDWARD L. YOUNG.

A class book of Chemistry, in which the Principles of the Science are familiarly explained, and applied to the Arts, Agriculture, Physiology, Dietetics, Ventilation, and the most important Phenomena of Nature: Designed for the use of Academies and Schools and Popular Reading. By EDWARD L. YOUNG, author of "A New Chart of Chemistry," New York: D. APPLETON & Co., 1851.

We have examined both these works, and are of opinion that they constitute, in connection, an exceedingly valuable contribution to the list of elementary works on the science of Chemistry. The Chart, especially, is an invaluable help to the student, and should find a conspicuous place in every school room of the State. It is highly recommended by Horace Mann, George B. Emerson, Ira Mayhew, Prof. Hare of Philadelphia, Prof. Gray, Dr. Antisell, and other competent judges. The "Class Book" is designed to cover the whole ground of the science and is an able and most instructive exposition.

ASSOCIATION OF GRADUATES OF THE STATE NORMAL SCHOOL.

REPORT.

The Corresponding Secretary respectfully reports:

That this Association was organized on the 26th day of September, 1849, for the purpose of effecting a more thorough community of interest, and of promoting a more extended, intimate, and friendly intercourse among the members thereof. It was also believed, that by means of a proper organization, and a judiciously administered system of operations, such an Association might be made a most powerful means for the advancement of the great cause of popular education, by furnishing to the schools of the State well qualified, efficient and faithful Teachers. The first of these objects, viz: that of effecting a more thorough community of interest, and of promoting a more extended, intimate and friendly intercourse, it was believed, might be attained by periodical re-unions, at which all might meet on common ground, and together blend their sympathies, proffer the kind word of encouragement, and thus gather new strength for the stern conflicts of the teachers' life.

The second object, viz: the promotion of the cause of education, by sending out to the schools of the State, well trained, efficient teachers, was to be accomplished by means of a system of communication between the officers of these schools and the members of this Association, through a Corresponding Secretary, to whom all applications, whether for teachers or schools, were to be made.

Upon the undersigned devolved the duties of the Secretaryship above mentioned, and it therefore becomes him to render an account of his stewardship for the past two years; to present such information as may be of interest to the Society, and such suggestions as its past experience and future wants seem to demand.

The first official act of the undersigned was that of issuing through the medium of the District School Journal, the following Circular, addressed to the Members of the Association and Officers of School Districts:

ASSOCIATION OF GRADUATES OF THE STATE NORMAL SCHOOL.

Circular.

It is for the interest of the members of this Association, as well as of the great cause it is designed to advance, that its functions should be discharged with efficiency and dispatch. The undersigned, therefore, submits the following suggestions to members, and all others whom they may concern:

1st. Applications for teachers should describe fully the school for which such teacher is desired. That is they should state the number of pupils; the branches to be taught; the character of school buildings;

the character of district; the general condition of the school; the salary to be paid, and whether or not board is to be included; if included, whether the teacher is to board around the district. These being questions which every teacher will wish answered previous to accepting a position; it is requested that trustees be particular on these points. If the application is for a Union School, it should state, in addition to the above, the number of departments, the number of teachers, and the department for which a candidate is wanted.

2d. Members who apply for schools should state, explicitly, the kind of situation desired, and the lowest salary they would be willing to accept.

3d. All applications, whether for schools or teachers, should be made in writing.

4th. Letters of application should possess the following characteristics, viz: legibility, clearness and brevity.

5th. Other correspondence of the members may be more extended—giving a brief account of their schools, their successes; improvements in methods of organization, discipline and instruction; together with such other information as may be useful to the Association.

6th. Letters from members, asking advice of the Faculty on any subject connected with their duties as teachers, will be promptly attended to.

7th. It is obvious that this society will not, at all times, be able to furnish immediately, situations for its members. The ability to provide them will be limited to the actual number of calls for teachers. Such applications, therefore, should be made as early as possible, and should be coupled with personal effort, on the part of the applicant, to provide for himself. Nevertheless, the Society will devote itself, promptly and energetically, to the interests of its members.

8th. All communications to the undersigned should be post-paid, that the funds of the Association may not be too largely drawn upon by the department of correspondence. And, as such communications are to be "placed on file," they should be written on good letter paper, with a margin on the first page of not less than one inch.

9th. It is to be remembered, that during the months of April and October occur the vacations in the State Normal School, and that communications directed to Albany at that time would not be immediately received by the undersigned.

Many of these suggestions have been observed by the members of the Association generally, with commendable fidelity.

Much embarrassment, however, has arisen from the failure of school officers and others, applying for teachers, from the omission to comply with their conditions: especially with those contained in articles 1st and 3d, in the foregoing Circular. Large numbers of letters have been received from Trustees and others, making the request for a teacher without giving any description of the school which it was desired to supply, and frequently without stating whether a male or female was required, whether any salary at all was to be paid, whether the poor pedagogue was to enjoy the miscellaneous hospitalities of the district or whether even, he would be provided with any place in which to rest his weary head when the day's thankless toils were over! This state of things has, as before observed, the embarrassed operations of the

Association, greatly multiplying its correspondence and preventing the prompt and efficient dispatch of business.

"Another source of difficulty has arisen from the limited amount of time given by school officers for the supply of a teacher. Many of these applications for instructors have requested that they be furnished 'immediately,' or within one or two weeks from the date of application. Several first class situations have, in this manner, been lost by members, notwithstanding the most energetic exertions of the Secretary to prevent the same. This fact would lead to the suggestion, that applications to fill vacancies in schools should be made when practicable, from four to six weeks before such vacancies occur, thus affording ample time and opportunity to make a judicious selection.

It is much to be regretted that article 5th of the Circular above quoted, which refers to article 12 of the Constitution, has not been more generally complied with by members of the Society. This article of the Constitution is as follows:

"It shall be the duty of every member to report himself to the Corresponding Secretary, at least once each year, stating in full, whether he is teaching, and if so, where, and with what success; also, what compensation he is receiving; with such other matter as he may think proper." Article 5 of the Circular, suggests, that "other correspondence of the members may be more extended—giving a brief account of their schools, their success, improvements in methods of organization, discipline and instruction, together with such other information as may be useful to the Association." Very few of these reports have been received, not one-fourth of the members of the Association having complied with the article of the Constitution above quoted. This omission can be accounted for only on the supposition that there is a growing disposition among young Americans to disregard all the sacred compacts that savor in the least of Constitutions, by which they are united in fraternal bonds!—a disposition devoutly to be deprecated—and for the effectual antidote to which a careful perusal of Washington's Farewell address is recommended!! But seriously, the spirit of this article properly carried out, could but prove of lasting benefit to the Society, inasmuch as the rich experiences of each and every member would thus be garnered up in one common storehouse, for the improvement of all. But there are other and stronger reasons still which should induce every member to comply with this wholesome provision. The Normal School has a deep interest in knowing the whereabouts and the whatabouts of her graduates. They are her children, and in their work-wide wanderings, as well as in their wearisome watchings at the post of duty, like all faithful mothers, she has a right to demand from them, at least once in a year, her tribute of gratitude and kind re-

membrance. The charge is not unfrequently made, that the graduates of this institution are not faithful, that they abandon their profession for some other employment, after having been educated at the expense of the State. If these articles were generally complied with, if the members of the Association were in good faith to report themselves yearly to the Secretary of this Society, the facts would be at hand with which to confront the groundless statements of unfaithfulness which are ever and anon, ladies and gentlemen, charged home upon you, by our enemies.

The matter thus collected might be annually condensed by the Cor. Secretary, and published for the benefit of the Association. We have much to learn before we arrive at the true and complete theory of elementary instruction. As yet we have learned little more than its alphabet. There is still a vast field to be explored. Teachers, as the only competent philosophical educators, have this work to do. The school-room is his laboratory. Here he must subject his theories to that test of actual experiment which alone can decide its truth or falsity: its practicability or impracticability. If advances are to be made in the all important work of educating, of developing the immortal nature of man, let it be repeated, the practical teacher must be in the main the great motive power.

That the force of these remarks may be the more readily seen, let it be supposed that this Association, numbering nearly 250 members, were separated into divisions of ten each. Suppose that to each, one of these divisions it were given, to test some particular theory in practical education: as for instance, it were given to one division to determine by actual trial in the school-room, whether the "word and Phonic method of instruction" combined, was the most efficient, expeditious and practicable mode of opening to the young the vast field of knowledge contained in books, or in other words, of teaching reading; suppose that to another, it was assigned to test in the same manner, whether the old or new methods of classification, as they are called, are best adapted to secure the great object for which schools are established; that to a third, it were submitted whether the analytic or synthetic modes of instruction in Arithmetic and general mathematics, were most successful; that to the fourth, it were given to determine which of the same methods applied to grammar and language in general, would be the most effectual as a means of discipline. Suppose, I say, that this course were to be pursued with all the divisions, assigning to each a different problem, to be thoroughly solved, the results of the various trials to be recorded and reported yearly to this Society; suppose this course were to be pursued for a series of years, who can calculate the amount of real, substantial, enduring benefit that would be conferred upon the cause

of education and humanity? It has been wisely said, that he who shortens the road to knowledge lengthens human life; and may it not be truly said, that he renders it thrice blessed and happy too? But how is this road to knowledge to be shortened?—Surely not by abridging the amount to be acquired, but rather by improving, perfecting, rendering natural the means and methods of its acquisition. Who, we again ask, is to accomplish this work? The teacher, the industrious, conscientious, energetic, faithful, philosophical teacher; not the *mechanical* but the philosophical teacher. This Association is admirably adapted to carry out a systematic plan for discovering and making known the best modes of instruction, or rather of developing, expanding mind, and consequently, of elevating and ennobling the human race. Why then should not the opportunity be seized upon, to give to this great cause—the greatest interest of humanity—a vigorous and successful impulse? It is a fact too notorious, that in our Teachers' associations, conventions and re-unions, we hear too much of Greece and Rome, of Alexander and Julius Cæsar, and too little of "how shall I improve my Profession? how shall I render its labors more effective, and its difficulties more surmountable?" Is the idea here proposed an impracticable one? Is its realization undesirable? In my humble judgment, nothing could be more practicable or more desirable, if we would reap the highest advantages of such an organization as this, or if we would witness the rapid and substantial progress of a cause so fraught with the highest interests of humanity.

Article 7 of the Circular before mentioned, states that "it is obvious that this Society will not, at all times, be able to furnish, immediately, situations for its members. The ability to provide them will be limited by the actual number of calls for teachers. Such applications, therefore, should be made as early as possible, and should be coupled with personal effort on the part of the applicant, to provide for himself. Nevertheless, the Society will devote itself, promptly and energetically, to the interests of its members."

It has been a source of regret to the undersigned that it has not been in his power to furnish a desirable situation to every applicant, and that promptly, on the receipt of his application. But to hope for this, would of course be to hope for impossibilities.—Our school laws have been in such an *unsettled* state, and public feeling has been so disturbed in relation thereto, since the formation of the Association, that the call for teachers has been more limited than probably it ever will be in the future, if the functions of the Society are properly discharged. During the exciting agitation of the free school question, large numbers of the schools of the State have been entirely closed, and many more still have employed teachers for a period limited by the amount of public money

received. It is believed that as the public mind becomes settled, as it becomes reconciled to the new order of things, as finally established by the new school law; as the Normal School becomes more widely and favorably known, and particularly, as the existence of this Association and its facilities for furnishing teachers are made more apparent, the demand will increase to an almost indefinite extent, or at least to an extent so great that the facilities here at present offered will be wholly inadequate to the wants of the community.

To those who may have been at any time disappointed in not receiving aid from an Association which they helped to establish, and from which they may have expected, perhaps too much, the undersigned can only say, in justice to himself, that all has been done that could be done, to meet the wishes of every individual member who has made them known. The reasons for some of the disappointments will be seen as we proceed.

The following are the statistics of the Association since its establishment, on the 26th of September, 1849:

Whole number of members.....	251
" " " regular members.....	236
Honorary "	15
No. of regular male members.....	118
" " " female "	118
Whole number of written applications for the supply of teachers.....	140
Whole No. written applications for schools	100
Whole number of verbal applications for teachers, about	75
Whole number of verbal applications for schools is about	100
Total applications for teachers.....	215
" " " schools.....	200
Whole number of teachers supplied, nearly	140
" " " letters received.....	525
" " " " written, about....	500
Of these there have been copied.....	150

These figures, ladies and gentlemen, will give you some idea of the amount of business which has been accomplished during the existence of the Association, whose age is now one year and ten months. I say some idea, but not a complete one; for when it is remembered that a large number of the teachers furnished have passed through this city, and that as a consequence, much time has been spent in advising with them concerning their new field of labor, in furnishing information in addition to that which a brief letter would convey, and if ladies, in assisting them to the proper modes of conveyance to their destination—I say when all this is borne in mind—a still more adequate notion may be formed of the work which has been, and must still continue to be done, to fulfill in the spirit as well as the letter, the duties which devolve upon the Secretary. Superadded

to all this the anxiety attending the discharge of these duties is no small item to be taken into account, in making up the sum total of the work to be done by this officer.

There are various considerations which have influenced the selection of candidates for the various situations that have been offered by school officers, which it may not be inappropriate, at this point, to state.

First, then and foremost, the question of adaptation must be considered; for upon this one thing, more than upon any and all others, depends the success of the candidate, and consequently, the good name and success of this Institution and, the usefulness of this Association. Applications are made to us from schools of every grade—from the secluded sparsely settled "rural districts" to the more advanced public and union schools and academies in our larger villages and cities. Besides this there are schools of more than ordinary difficulty in many localities—schools requiring peculiar qualifications on the part of the instructor, in order to success. Again, there are different grades of teachers—different in regard to scholarship, experience, natural and acquired adaptation to the profession; and it is therefore obvious that it would be highly improper and inexpedient to recommend, without discrimination, whatever individual might be foremost on the list of applicants. Too much stress cannot be laid upon this point, for a disregard of it could but lead to the most disastrous consequences to the employers and employed, as well as the institution that has prepared and recommended them.

The second consideration which has influenced the selection of teachers is that of priority of application. It is obvious that this should, and indeed must have, its due weight in any system of operations laying claim to justice and impartiality. When, therefore, the former question—that of adaptation—has been disposed of this should be the principal motive which is to influence the decisions, provided always that a third does not interfere to overrule it.

This third relates to the length of time required to reach the candidate. Justice must be done to the employees as well as the employed. The district or school may require the immediate care of a teacher, and they would be greatly incommoded by tardiness in the matter. Or perhaps a day is set as the ultimatum of the time the employers are to wait. In such cases it is quite certain that the distant candidate, or the one whose present engagement has not terminated, and cannot terminate till a given period, must give way to one who is more accessible, provided well qualified, although his application may be of a later date than the former.

The second and third considerations, however, in the judgment of the undersigned, should be modified somewhat by the fourth, viz: *that the actual necessities of a candidate by reason of poverty, or misfor-*

tune, ought, provided he is well qualified, to exert a controlling influence in the selection to be made.

The fifth and last consideration, other things being equal, refers to the fact, *as to whether an individual has shared more liberally than another in the benefits of this Association.* Some cases have occurred during the past two years, of members having seemingly depended entirely upon the Society for aid, and who have been quite imperious in their demands upon it, although not so much entitled to its assistance, in consequence of former favors, as many of their brethren. In such cases, there is a strong temptation to grant the request, even at the expense of another, on the principle, that "lest by their continued coming they weary me," &c. But however strong the temptation, the *fall* should be rigidly guarded against.

The foregoing are, gentlemen, in brief, the principles by which the Cor. Sec'y. has endeavored to regulate his action in the often arduous, and always responsible duty of recommending and furnishing teachers for the schools of this State. That they are the only just ones, he entertains not a doubt; and that you will coincide in this belief he is equally certain. But no matter how just our motives, how earnest and untiring and self-sacrificing our labors may have been, we dare not even hope that all have been satisfied; but of this, we are certain, viz: that if the labors, difficulties and perplexities attendant upon the discharge of these duties could be realized by all, no murmur of dissatisfaction would be heard.

Not the least gratifying feature of the times during the past two years, has been the fact, that applications for Normal teachers have been frequently made from other States and from the British Provinces.—This circumstance would seem to speak well for the standing of the Normal School and of Normal Graduates abroad. In most cases we have felt it to be our duty, in reply to these applications, to decline the recommendation of graduates out of the State, inasmuch as this institution is established for the supply of her own educational wants, and being almost entirely supported by funds drawn from her treasury, it would seem to be the duty of the graduate to remain at home so long as his labors were demanded, appreciated, and well remunerated here. In case, however, the position offered was a commanding one, was such as to exert an influence in favor of the Normal cause abroad; and in case also, the graduates were not in demand at home, it has been thought advisable to recommend them temporarily at least, to influential situations in other States when desired.—The correspondence of the past two years has shown that nearly every State in this widely extended Union, from the Aroostook to the Rio Grande, is reaping the benefits of the Normal influence, as diffused through the graduates of this school. Many have even passed through the "Golden Gates"; and while laboring to

store the minds of the young Californian with the rich gems of mental and moral wealth, are, strange to say! filling their own purses with the sparkling products of the golden sands! Some also, have penetrated the

* * * "continuous woods
Where rolls the Oregon," * * *

and are shedding around them in those old forests, grown grey with centuries, the bright beams of civilization and intelligence, and are literally making the wilderness to bud and blossom as the rose.

Thus, Mr. President and gentlemen of the Association, I have given you a brief and imperfect sketch of the work of the Association from the time of its organization. I have as yet, however, spoken only of and to the living, while now, duty, respect and affection, alike, demand that an appropriate tribute be paid to the memory of the dead. I am most happy in being able to communicate to you the fact, that the Great Destroyer has dealt mercifully with us: one only of the members of this Society having been removed from the scene of her earthly trials, so far as our knowledge extends. Of this one it may with truth be said, that Death chose a shining mark.—Miss HARRIET E. CHICHESTER, of Tioga Co., was called suddenly to rest from her labors, on the 17th of October last, after an illness of but ten days. She was located almost within view of this edifice, within which, but a few days before, she had met with many now present, to witness the closing proceedings of her old Alma Mater; she was surrounded by nearly every attraction that could render life desirable—save the friends of her youth. In a new and beautiful edifice, on a green, grassy knoll that overlooks the placid Hudson and the adjacent country for many miles; surrounded by an obedient and affectionate flock of about 25 pupils, with every facility that a wealthy and enthusiastic community could furnish for the proper education of that flock,—what could more strongly attach her to this life? Yet she left them all without regret; and while the tears of her beloved charge flowed freely and gushingly, she breathed out this mortal life in the arms of strangers, and passed to that Higher life, herself to be taught by the Great Teacher with powers unfettered and vision unobscured. It would be a pleasing yet melancholy duty to say more concerning this event, but we have perhaps, already said more than on occasions like the present would be ordinarily justifiable. But she passed away among strangers, with none but stranger hands to soothe the dying pillow—with none but stranger voices to speak the soothing word of sympathy and affection; and as no notice of her departure had been made public, justice seemed to demand that something should be said of the faithful teacher who passed away, even in the midst of her useful labors.

Our task is now done; we have endeavored to render as clearly as possible, an account of our stewardship, and to present as far as possible, a clear view

of the affairs of this Association. How far this has been done you are to be judges. Allow me, in conclusion, to say, in justice to myself, that the Association has had my best services in the past, as it will have my best wishes in the future. The influence which, in connection with the Institution that gave it birth, it is destined to exert on the welfare and progression of humanity if properly directed, it will be no easy task to estimate.

Let then, this influence be such as shall redound to the highest good of the great cause it was designed to advance.

All of which is respectfully submitted,
W. F. PHELPS, Cor. Sec'y.

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